

ON AN UNNAMED SPECIES OF PECTEN FROM THE
TERTIARY (BARWONIAN) OF SOUTHERN AUSTRALIA.

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(Plate V.)

A form of *Pecten*, somewhat closely related to Tate's *Pecten consobrinus* has long been known to Australian palaeontologists as *P. consobrinus* var. In Professor Tate's "A Revision of the Older Tertiary Mollusca of Australia,"* that author refers to *P. consobrinus*, var., as occurring at Aldinga Bay (Lower beds), Shelford, Maude and Belmont, Waurm Ponds, and Spring Creek. Messrs. Dennant and Kitson, in their "Catalogue of the Described Species of Fossils (except Bryozoa and Foraminifera) in the Cainozoic Fauna of Victoria, South Australia, and Tasmania,"† cite the following localities for *Pecten consobrinus* var. Tate:—Aldinga (Lower beds), Aire Coast, Fishing Point and Guerard Hill, Shelford, Lower Moorabool, Maude, ? Corio Bay, Curlewis-Belmont, ? Mitchell River, Waurm Ponds, and Spring Creek.

It will thus be seen that this particular form is practically restricted to Janjukian beds, and possibly to the horizon immediately below, or the summit of the Balcombian series.

The species *P. consobrinus* was originally described from the Upper beds at Aldinga; whilst the variety occurs in the lower part of the same series, which is shown by its faunal characters, allowing for local lithological differences, to belong to our Victorian Janjukian beds.

The present note is written to establish a name for this variety of *P. consobrinus*, for the convenience of future reference. Since it would appear illogical to refer to an ancestral form of an already described species as a variety thereof, it seems advisable to give it a specific standing, at the same time bearing in mind the fairly close relationship existing between it and the species from the younger beds. Its claims to a specific name are perhaps as great as are those of *P. antiaustralis* and *P. australis*. The affinity with *P. consobrina* is denoted by the denomination *praecursor*.

DESCRIPTION OF TYPE OF PECTEN PRAECURSOR, SP. NOV.
(= "*P. consobrinus* VAR." TATE).

The type selected is a left valve of medium size (between the neanic and ephebic stages).

Locality—Spring Creek, Torquay (*ex* Dennant Coll.)

* Trans. R. Soc. South Australia, vol. xxiii, 1899, p. 269.

† Rec. Geol. Surv., Victoria, vol. i., pt. 2, 1903, p. 119.

Description.—Valve triangularly orbicular, nearly equilateral, the antero-ventral border more sharply curved than the posterior; surface with ten major folds, subacute, with a summit ridge and generally two lateral ridges on either side; interspaces occupied by from 2-6 costulae, the central usually stronger. All the riblets are closely lamellose or tegulate. Ground surface finely granulate, with shagreen texture, tending to develop into transverse undulate ornament at the extremities of the valves. Ears very unequal; anterior triangular, with outer margin truncated, having five radial costae; interspaces granular; posterior triangular, truncated; faintly costate and granular.

Measurements of type—Height, 25 mm.; length, 24 mm.

Remarks.—This form differs from *P. consobrinus* in having normally ten folds instead of eight. The folds are subacute, whereas in *P. consobrinus* they are gently convex and equally and numerously costate. In *P. praecursor*, moreover, the transverse ornament of the riblets is, in fresh specimens, more decidedly tegulate, whereas in *P. consobrinus* the ornament is a series of delicate concentric frills.

This species appears to pass upward into *P. consobrinus* (Kalimnan) by loss of major folds, and to pass downward into *P. foulcheri* (Janjukian) and Balcombian by increase of folds and transition of tegulate ornament into the erect squamose.

EXPLANATION OF PLATE V.

- Fig. 1.—*Pecten praecursor*, sp. nov. Holotype. Spring Creek, Torquay. (Dennant Coll.) Janjukian.
- Fig. 2.—*P. praecursor*, sp. nov. Paratype. Waurm Ponds, near Geelong. (Coll. Geol. Surv., Victoria.) Janjukian.
- Fig. 3.—*P. praecursor*, sp. nov. Paratype. Curlewis. (Coll. Geol. Surv., Victoria. Ad. 12.) Barwonian.

The figures are enlarged 7-25ths more than actual size

